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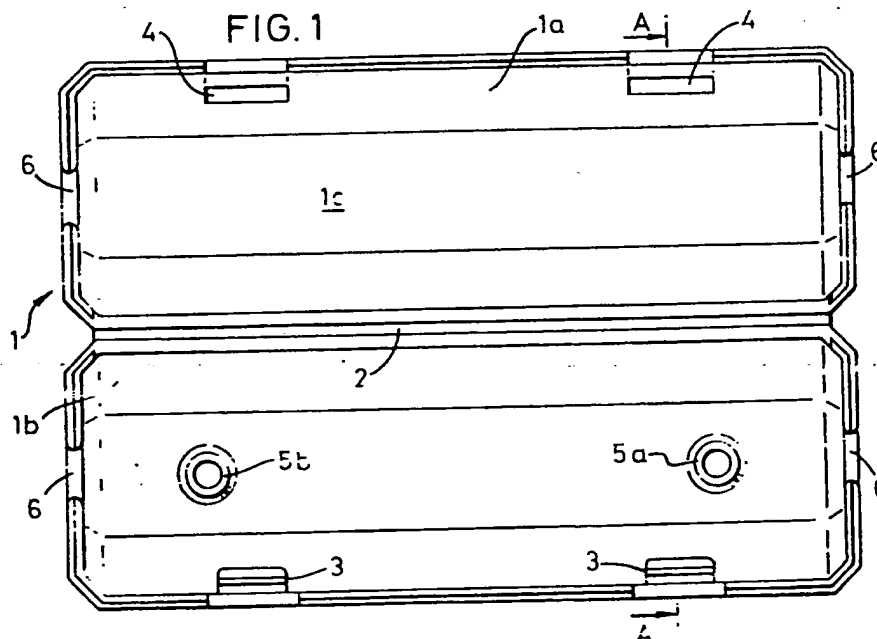
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(54) Cable tidy

(57) A cable tidy for the electric cable of a vacuum cleaner comprises a container (1) formed by half-shells (1A, 1B) hinged together along one edge. One half-shell has upstanding pegs (5A, 5B) around which a length of cable is looped, the cable being led into and out of the container through respective apertures (6). Snap fasteners secure the half-shells together when the container is closed.



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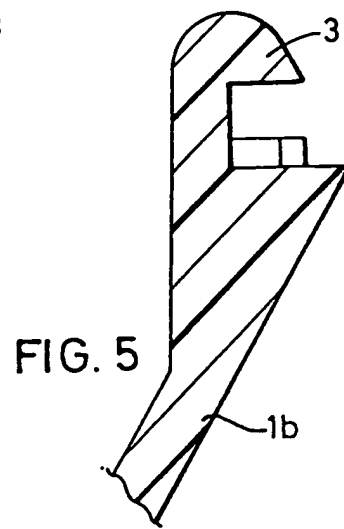
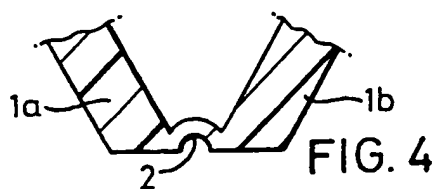
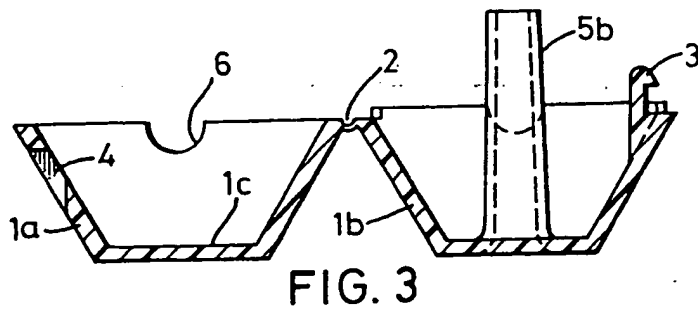
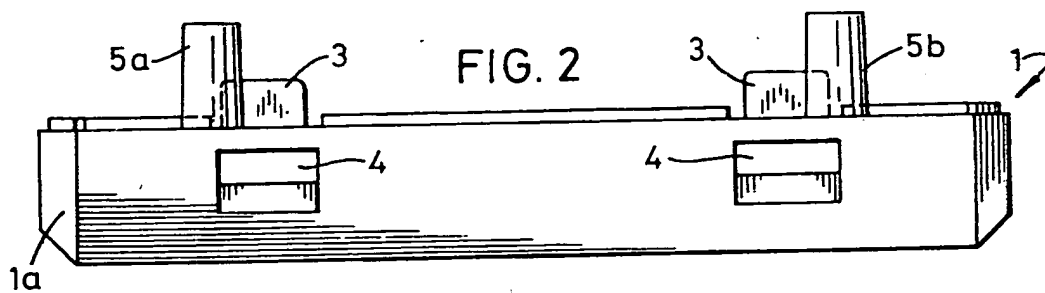
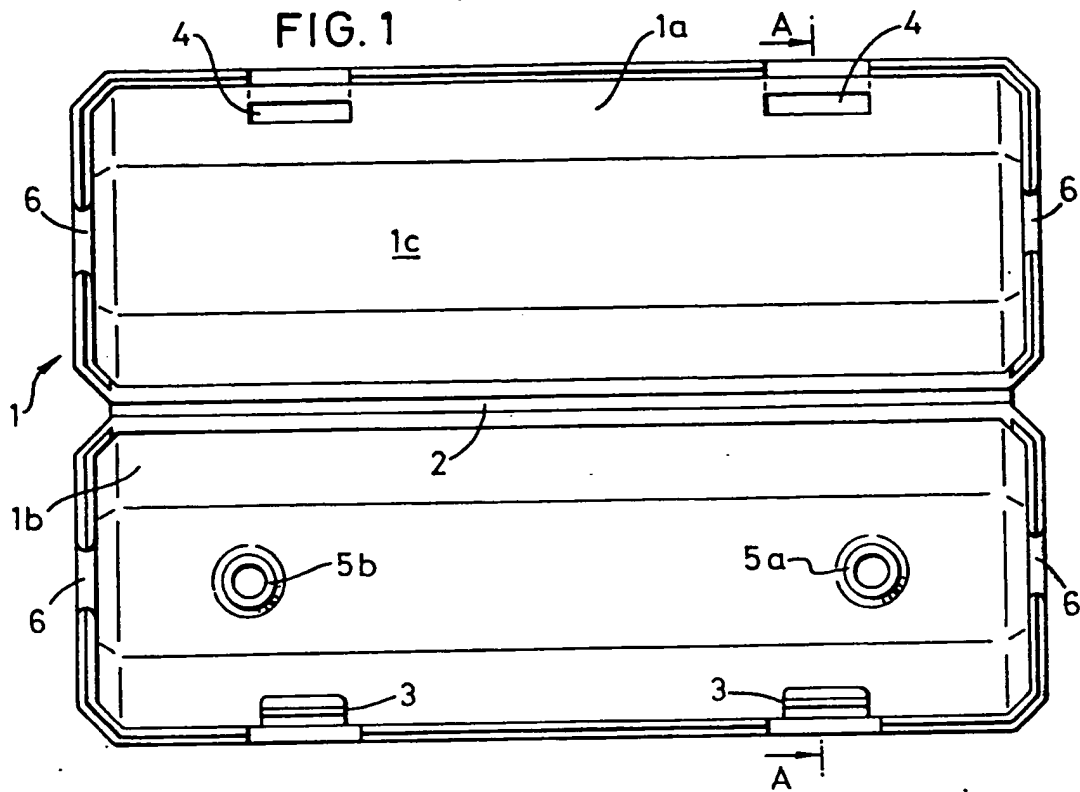


FIG. 6

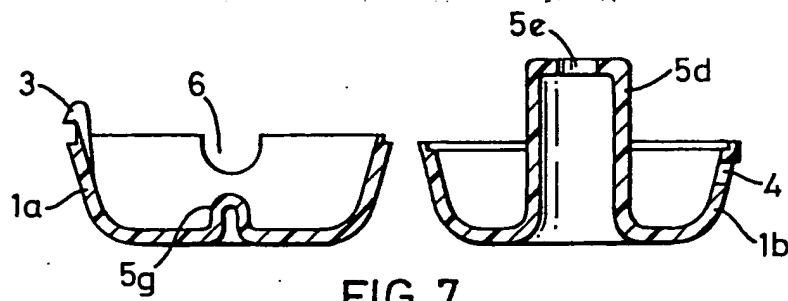
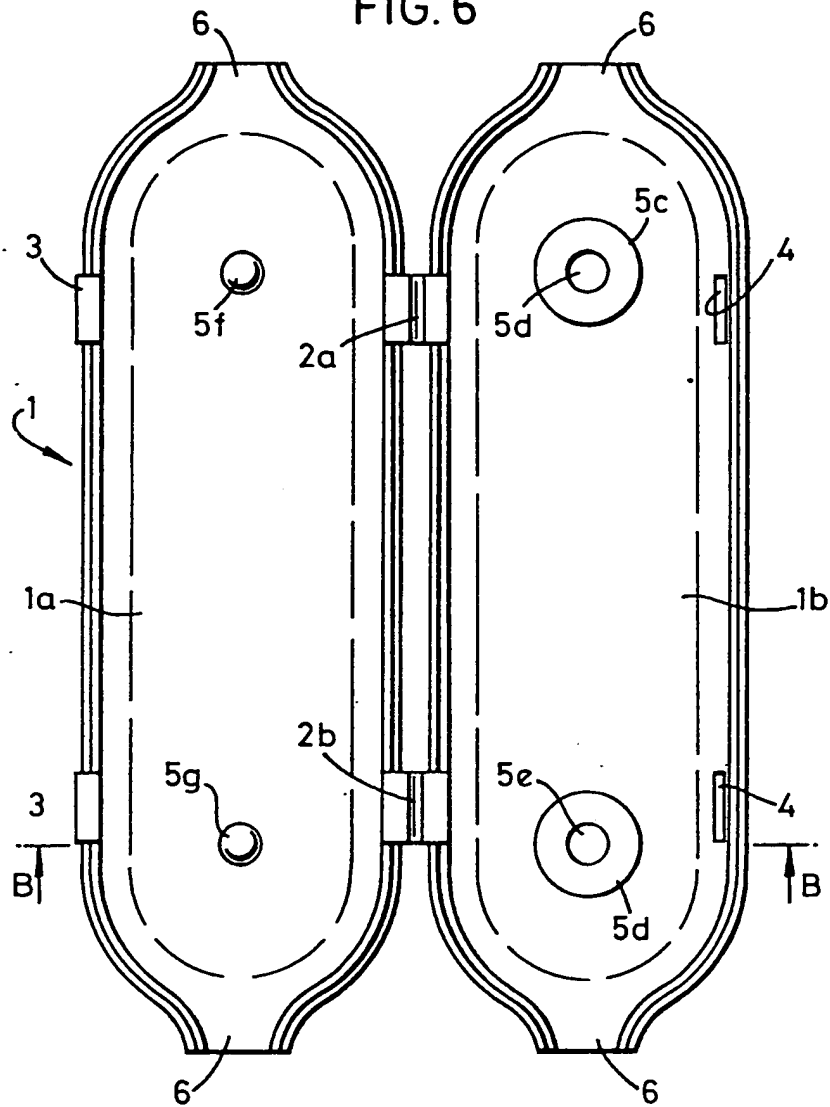


FIG. 7

This invention relates to a cable tidy which facilitates the shortening (without cutting) of an insulated cable which is attached at one end to an electrical connector and at its other end to an electrical appliance.

Electrical appliances are sometimes connected to plugs by too long a length of cable. Beside being unsightly, the superfluous cable may form a loop or loops on the floor which can lead to accidents.

It is known to provide an electrical appliance, such as a vacuum cleaners, with an automatic cable rewind drum which enables a cable to be extended and withdrawn as required. However, such drums can only be used with the appliance on which they are fitted. It is also known to provide an independent drum having a socket fitted to one end of a cable and a plug fitted to the other end. However, such drums are cumbersome (since they contain a long length of cable) and they are also expensive. Moreover, one drum would be needed for each appliance in order to provide an appropriate length of cable.

The present invention seeks to overcome these problems.

In accordance with the invention, a cable tidy comprises an openable container for storing a length of an insulated cable which is attached at one end to an electrical connector and at its other end to an electrical appliance, said container having an entrance aperture and an exit aperture to accommodate said cable, said apertures being structured to enable the container to be opened to receive said length of cable and to be subsequently closed

without disconnecting the cable from said connector or electrical appliance, or cutting the cable; said container also having cable retaining means for retaining said length of cable therein.

Preferably, the cable retaining means comprises a pair of spaced pegs projecting from one wall of the container towards an opposite wall thereof. The length of cable can then be wound around the pegs in order to accommodate it within the container and also to prevent the wound length from being pulled out. The pegs preferably extend by a distance which, when the container is closed, provides a clearance (adjacent an opposite wall) that is less than the size of the entrance and/or exit aperture. This prevents the cable from sliding over the ends of the pegs when the container is closed. In a preferred embodiment, the apertures have a circular cross-section to accommodate a cable having a similar cross-section. The clearance between the ends of the pegs and the opposite wall is then less than the diameter of the apertures and hence less than the diameter of the cable.

Preferably, the container has an elongate body and the pegs are spaced apart on a longitudinal axis of the body. This provides a neat appearance in that the length of cable is coiled, in elongated loops, parallel with the path of the cable, i.e. between the connector and the electrical appliance.

The container may be made as a one-piece moulding comprising half-shells connected together by an integral hinge. Such half-shells are preferably provided with integral means to provide at least one snap fastener to hold the shells together when the container is closed.

Embodiments of the invention will now be described with reference to the accompanying drawings, in which:

Fig. 1 is a plan view of a cable tidy according to a first embodiment of the invention showing two-halves of a one piece moulded container in an open position.

Fig. 2 is a side elevation of the container shown in Fig. 1.

Fig. 3 is a cross-section, on line A-A, of Fig. 1.

Fig. 4 is an enlargement, in cross-section, of an integral hinge shown in Fig. 3.

Fig. 5 is an enlargement, in cross-section, of a fastening device.

Fig. 6 is a plan view of another embodiment of the invention showing the container in a open position and

Fig. 7 is a cross-section, on line B-B of Fig. 6.

The cable tidy shown in Figs. 1-5 includes a container 1 formed by two substantially rectangular half shells, 1a and 1b, which are joined together, by an integral hinge 2, along one edge. Each half shell 1a, 1b has a tapering cross-section, as best seen in Fig. 3. Figs. 1 and 3 show the container 1 in an open position, but the container can be closed in order to engage snap fasteners (3, 4). Each snap fastener comprises a catch or hook 3 which is integrally moulded adjacent a closing edge of shell 1b, and an aperture or recess 4 in the sloping side adjacent to the closing edge of shell 1a. Two hooks 3 and corresponding apertures 4 are provided to ensure that the ends of container are held together when closed.

A pair of pegs, 5a, 5b are upstanding from the base of shell 1b, each peg being slightly tapered or conical as shown in the drawings. The height of each peg 5a, 5b is such that, when the container is closed, there is a small clearance between the end of each peg and the confronting base or wall 1c of shell 1a. This clearance is smaller than, for example, the diameter of circular section cable for which the cable tidy is designed to be used.

Semi-circular recesses 6 are provided in each end wall of each half-shell 1a, 1b. When the container is closed, corresponding recesses 6 define circular apertures for accommodating (e.g.) the diameter of the insulated cable for which the cable tidy is designed to be used. The circular apertures 5 provide an entrance and an exit for leading the insulated cable into and out of the container 1.

In use, where there is a superfluous length of cable between an electrical connector (e.g. a plug) and an electrical appliance, this length of cable is coiled around pegs 5a, 5b, the cable being led through the entrance and exit apertures 6. The container 1 is then closed by securing snap fasteners 3, 4. The pegs 5a, 5b not only serve to store the loops of superfluous cable, but also prevent the cable from being pulled out of the container 1 e.g. when the electrical connector or the electrical appliance is moved.

The dimensions of the container 1 are such that its internal volume or capacity will accommodate a certain maximum length of cable. These dimensions can, of course, be varied to accommodate cables of different sizes or different lengths of cable.

Since container 1 has an elongate shape it provides a streamline and pleasing appearance. However, container 1 may be made of different shapes to suit particular requirements

The components of container 1 are shaped to facilitate one-piece moulding. For example, the half-shells and pegs have a tapering shape and the hinge 2 and snap fasteners (3, 4) are of an integral construction.

Figs. 6 and 7 illustrate a cable tidy according to another embodiment of the invention. In this embodiment, similar components have been given similar reference numerals and the construction and method of operation is substantially the same. However, it will be noted that pegs 5c, 5d each have an aperture 5d, 5e for receiving corresponding upstanding projections 5f, 5g formed in the base of half-shell 1a. This prevents the cable from sliding across the ends of the pegs 5c, 5d (as in the previous embodiment) when the container is closed. Also, in this embodiment, the half-shells 5c, 5d can be separately moulded and joined together by independent hinges 2a, 2b. The ends of the half-shells 5c, 5d are also shaped so as to provide a more streamline finish in the vicinity of the entrance and exit apertures 6.

Whilst embodiments of the invention have been described in detail, changes and modifications may be made without departing from the scope of the invention.

CLAIMS

1. A cable tidy comprising an openable container for storing a length of an insulated cable which is attached at one end to an electrical connector and at its other end to an electrical appliance, said container having an entrance aperture and an exit aperture to accommodate said cable, said apertures being structured to enable the container to be opened to receive said length of cable and to be subsequently closed without disconnecting the cable from said connector or electrical appliance, or cutting the cable; said container also having cable retaining means for retaining said length of cable therein.

2. A cable tidy according to claim 1 wherein the cable retaining means comprises a pair of spaced pegs projecting from one wall of the container towards an opposite wall thereof.

3. A cable tidy according to claim 2 wherein the pegs extend by a predetermined distance, said distance being such that the clearance between the ends of the pegs and said opposite wall is less than the size of said apertures whereby a cable is prevented from sliding over the ends of the pegs when the container is closed.

4. A cable tidy according to claim 3 wherein said apertures have a circular cross-section to accommodate cable having a similar cross-section, said clearance being less than the diameter of said apertures.

5. A cable tidy according to any of the preceding claims wherein the container has an elongate body and the pegs are spaced apart on a longitudinal axis of the body.

6. A cable tidy according to any of the preceding claims wherein the container is made as a one-piece moulding comprising half-shells connected together by an integral hinge.

7. A cable tidy according to claim 6 wherein said half-shells are provided with integral means to provide at least one snap fastener to hold the shells together when the container is closed.

8. A cable tidy substantially as herein described with reference to Figs. 1-5 or 6 and 7 of the accompanying drawings.